FINDING OF NO SIGNIFICANT IMPACT
FOR THE
REHABILITATION OF EAST STATE PARK ROAD
AND MISCELLANEOUS IMPROVMENTS
ENVIRONMENTAL ASSESSMENT

INDIANA DUNES NATIONAL LAKESHORE

BACKGROUND

The Indiana Dunes National Lakeshore (National Lakeshore) was authorized by Congress in 1966 to preserve the complex ecosystems that exist on the dunes along Lake Michigan. The mission of the National Lakeshore is to preserve the dunes and other areas of scenic, scientific, and historic interest and recreational value and to provide for educational, inspirational, and recreational use by the public so long as such use is compatible with the preservation of the National Lakeshore's unique flora, fauna, and physical geographic conditions and its historic sites and structures. The National Lakeshore was established during an era when the Nation struggled to balance America's need for conservation with its need for economical and industrial development. Various steel companies are located between the east and west units of the National Lakeshore and along the west boundary. Most of the land outside of the National Lakeshore has been developed.

The National Lakeshore proposes to improve safe access for vehicles along East State Park Road and Beverly Drive while minimizing disruption to the surrounding wetland environment, and improve safety at the intersection of the Mt. Baldy Entrance Road and U.S. Route 12. The asphalt pavement along the entire length of East State Park Road is in poor condition. A portion of the roadway length, in the vicinity of the intersection with Beverly Drive, frequently becomes flooded and the pavement is completely submerged in standing water for extended time periods. The saturation of the road base, surface, and shoulders causes the pavement to deteriorate. Deteriorated pavements experience cracking, crumbling, and require additional maintenance such as crack sealing and pothole patching. When there is standing water on the roadway, the effects on visitors and residents driving this intersection include: poor driving conditions, reduced traffic capacity (lower speeds), loss of steering and braking control, and increased potential for vehicles to stray from the roadway. During the winter, the frozen floodwaters create very slick and unsafe conditions. The standing water on the roadway also washes into the vehicle undercarriages, distributing vehicle contaminants such as oil and antifreeze into the wetlands adjacent to the roadway.

The Federal Highway Administration (FHWA) prepared the Environmental Assessment for the Rehabilitation of East State Park Road, Realignment of Mt. Baldy Entrance and Miscellaneous Improvements (EA) in cooperation with the National Lakeshore, and it was available for public review from September 18, 2006, through October 17, 2006.

The EA analyzed five alternatives at the intersection of East State Park Road and Beverly Drive: the No Action, the Multiple-Culvert Alternative, the Multiple-Trench Drain Alternative, the Obliteration Alternative, and the Flow-Control Berm Alternative. A preferred alternative was not identified because the property west of East State Park Road is owned by the State of Indiana and managed by the Indiana Dunes State Park, not the National Lakeshore. The Town of Beverly Shores owns the roadway itself; however the National Lakeshore owns the land east of East State Park Road and has authority to maintain the roadways through the National Lakeshore. The EA analyzed two alternatives at the Mt. Baldy Entrance Road: the No Action Alternative and the Action Alternative (Preferred Alternative). The EA was prepared pursuant to the Council of Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) (40 CFR 1500 et seq.), 42 U.S.C. 4332(2)(C), and National Park Service Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision making and Handbook (2003) (DO-12).

The Town of Beverly Shores asked for additional time to analyze the alternatives at the East State Park Road – Beverly Drive intersection and determine their preference. The proposed action at the Mt. Baldy Entrance Road has minor adverse impacts and was not controversial. In order to avoid potential delays to this portion of the project, the impacts of this action were analyzed separately and found to quality for an existing categorical exclusion. The proper forms were prepared and approved by the Superintendent. This FONSI then considers only that portion of the project described in the EA as the rehabilitation of East State Park Road.

Through coordination with the Indiana Dunes State Park, the Town of Beverly Shores, and the National Lakeshore following the public comment period, the Multiple Trench Drain Alternative was determined to be the Preferred Alternative for the East State Park Road location. A Statement of Finding detailing the determination of the Preferred Alternative and its impacts to wetlands was released for public comment from August 1, 2007 through August 30, 2007.

SELECTED ALTERNATIVE

The National Lakeshore, in cooperation with the FHWA, has selected the Multiple Trench Drain Alternative. Under the Multiple Trench Drain Alternative, the existing concrete and asphalt pavement of East State Park Road and Beverly Drive will remain in place. In order to widen the roadway to current design standards, the material east of East State Park Road and on either side of Beverly Drive will be excavated, and rip-rap will be placed up to the elevation of the roadway. Multiple trench drains will be placed on top of the roadway in order to allow water to mimic its existing flow across the roadway. Fill material will be placed between the trench drains and asphalt pavement will be placed on top of the fill material and adjacent to the trench drains, so that the metal grate of the trench drains and asphalt surface will create a continuous driving surface. If determined as necessary during the design process, a headwall may be

constructed on each side of the trench drain. The number of trench drains will be determined during the design process. The raised surface with trench drains across the roadway will extend no longer than 1,000 feet along East State Park Road, and no longer than 300 feet along Beverly Drive. These distances will also be determined during the design process. The new roadway will be constructed according to current design standards; therefore the raised roadway will be approximately 28 feet wide (two ten-foot lanes with 4-foot shoulders), which is 10 feet wider than the existing pavement. The roadway will be raised approximately 24 inches. In order to calculate the impact areas to compare the alternatives the following assumptions were used: a roadway height of 2.0 feet above existing, a length of 1,300 feet for the raised roadway, and a slope ratio of 4:1 to the existing ground elevation.

OTHER ALTERNATIVES CONSIDERED

No Action Alternative

Under the No Action Alternative, no pavement rehabilitation would take place on East State Park Road. Flooding would continue to occur on the roadway and likely worsen over time. The road base and pavement would likely continue to deteriorate, which would require patching, and the road may need to be closed periodically to traffic. Maintenance activities would continue on the roads. The Town of Beverly Shores owns East State Park Road and therefore any decisions to close the road or reconfigure the road would be the responsibility of the Town of Beverly Shores.

Multiple Culvert Alternative

The existing roadway would remain in place to ensure a solid base material, however some milling (removal of the top portion of the pavement) may be necessary to create a level base. In order to widen the roadway to current design standards, the material east of East State Park Road and on either side of Beverly Drive would be excavated, and rip-rap would be placed up to the elevation of the roadway. Culverts would be placed at the level of the roadway to allow water to mimic its existing flow across the roadway. Fill material would be placed between the culverts and on top of the culverts according to design specifications. The number and size of the culverts would be determined during the design process. The water elevations on either side of the roadways would remain the same as the current water elevations. Fill material would be placed along the sides of the raised roadway to create shoulders that slope down to the existing ground elevation adjacent to the roadway. The new roadway would be constructed according to current design standards; therefore the raised roadway would be approximately 28 feet wide (two ten-foot lanes with 4-foot shoulders), which is 10 feet wider than the existing pavement. The length of the raised roadway would be no longer than 1,000 feet along East State Park Road, and no longer than 300 feet along Beverly Drive. The road would be raised a maximum of 6 feet to accommodate the placement of culverts. The exact dimensions and length of the roadway would be determined during the design process. In

order to calculate the impact areas to compare the alternatives the following assumptions were used: a roadway height of 6 feet above the existing, a length of 1,300 feet for the raised roadway, and a slope ratio of 4:1 to the existing ground elevation.

Obliteration Alternative

Approximately 200 feet of Beverly Drive from the East State Park Road intersection eastward would be obliterated, and so Beverly Drive would become a dead end at the existing parking area that serves the paved bird-watching trail. Visiting traffic could access the bird-watching trail via Broadway, which is located east of East State Park Road. Water would flow freely from the area northeast of the intersection to the area southeast of the intersection. The entire area of obliterated road would be used to create new wetland. This wetland area would be created through coordination with the National Lakeshore staff and similar to the ongoing mitigation efforts in the National Lakeshore. The ground elevation would blend into the wetland areas to the north and south of Beverly Drive, and native species would be used to re-vegetate the area.

Flow-Control Berm Alternative

An earth berm would be constructed parallel to East State Park Road, and a second berm parallel to Beverly Drive. A ditch would be constructed between the berm and road shoulder. Excavation would be required so that stronger fill material could be used to construct the berm. The height of the berm would equal the desired maximum water elevation that is preferred for the northeast wetland area. The berms would retain surface water in the wetland up to the maximum level, then would allow overflow to enter the ditch. A gate or alternative adjustable mechanism could be installed to allow the adjustment of the water level behind the berm. The width of the ditch and berm are assumed to be a total of 10 feet for the purposes of this comparative analysis; however the exact dimensions would be determined during design. In order to calculate the impact areas to compare the alternatives the following assumptions were used: a berm and ditch width of 10 feet, and a length of 1,300 feet (East State Park Road and Beverly Drive).

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The Environmentally Preferable Alternative is simply put, "this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources" (DO-12 Handbook Section 2.7.D).

The Multiple-Trench Drain Alternative would address the deteriorating pavement and the safety hazard of standing water on the road. This alternative would also allow for the movement of water similar to the existing conditions without impacting the water elevations of the surrounding wetlands. The roadway would be raised less by the Multiple-Trench Drain Alternative than the Multiple-Culvert Alternative, which lessens

the impacts to the wetlands and vegetation, while achieving the same end result of keeping water off of the roadway.

WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined at 40 CFR §1508.27, from the regulations of the Council on Environmental Quality that implement the provisions of NEPA, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

The Selected Alternative will include the placement of fill material to widen the roadway to current design standards and to raise the roadway to place the trench drains. This will have a long-term minor adverse impact to vegetation and wetlands. Wetlands will be restored concurrently with the construction project to mitigate for the wetland acreage adversely impacted. The Selected Alternative will have a minor short term adverse impact to wildlife and wildlife habitat during construction from the increase in noise and human activity. Wildlife and wildlife habitat will experience a long-term negligible adverse impact because the widened roadway will permanently destroy a small portion of potential habitat. The Selected Alternative will have a long-term moderate beneficial impact to local area flooding. The surface water that is currently standing on the roadway creating potential safety concerns will flow through the trench drains. The Selected Alternative will have a long-term minor beneficial impact to visitor use and experience and visitor conflicts and safety because the standing water concerns will be addressed. The deteriorated roadway will also be fixed.

The degree to which the action affects public health or safety.

The Selected Alternative will have a long-term minor beneficial impact to health and safety. The flood waters will flow through the trench drains along the raised roadway, which will alleviate the safety concerns associated with standing water and ice on the roadway. Short-term minor adverse impacts will occur during construction because of the possible conflicts between construction equipment and motorists.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

There are no historic or cultural resources, prime farmlands, or wild and scenic rivers within the study area. The Selected Alternative is located within the Great Marsh, an extensive wetland complex that has historically been ditched and drained. The Great Marsh wetlands in the study area are comprised of palustrine emergent semi-permanently

flooded wetlands. The Selected Alternative will impact a maximum of 0.78 acres, and will be mitigated through restoration in a wetland area that is approximately 2 miles east, which is approximately 2.5 acre in size.

The study area is within the range of the Federally endangered Indiana bat, Karner blue butterfly, and piping plover, and threatened bald eagle, however no habitat was identified for these species. Therefore the Selected Alternative is not likely to adversely affect these endangered and threatened species or critical habitat.

The degree to which the effects on the quality of the human environment are likely to be highly controversial.

Implementation of the project will not result in controversial effects on the human environment. Flooding of the intersection of East State Park Road and Beverly Drive has been identified by the National Lakeshore, the Town of Beverly Shores, and visitors as a potential safety hazard. The intersection has been closed in the past due to hazardous conditions. Most of the comments received during the public comment period stated a preference for the Multiple Trench Drain Alternative and the Obliteration Alternative.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.

There are no identified risks associated with the Selected Alternative that are unique or unknown, and there are no effects associated with the Selected Alternative that are highly uncertain that were identified during the analysis for the EA or during the public review of the EA.

The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Selected Alternative does not establish a precedent for any future actions that may have significant effects, nor does it represent decisions about future considerations. The purpose of this action is to address safety concerns associated with the deterioration of the roadway and standing water at the intersection of East State Park Road and Beverly Drive.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The Town of Beverly Shores may be repairing Beverly Drive from Montana to Derby Ditch if $145,000 of additional funding is obtained. This work would include road rehabilitation to address deteriorated pavement east from Derby Ditch. The Selected Alternative, along with the known impacts from other actions in the past, present, and reasonably foreseeable future, will not cause a significant cumulative effect.

Prior to the development of this area, naturally occurring fires cleared the dead wood and maintained prairie and savanna habitats. As civilization grew, so did efforts to repress these fires. This resulted in loss or alteration of open habitats as well as a loss of plant and animal diversity. The National Lakeshore conducts a prescribed burn program for restoring the area's prairies. Prescribed burns occur every 5-7 years. The Selected Alternative, along with the known impacts from other actions in the past, present, and reasonably foreseeable future, will not cause a significant cumulative impact.

The degree to which the action may adversely affect items listed or eligible for listing in the National Register of Historic Places, or other significant scientific, cultural or historic resources.

The State Historic Preservation Office stated in a letter dated January 4, 2007 that the Office concurred with the National Lakeshore's finding that there are no historic buildings, structures, districts, objects or archaeological resources within the area of potential effect.

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The United States Fish and Wildlife Service stated in a letter dated December 27, 2004, that "The proposed project is within the range of the Federally endangered Indiana bat (*Myotis sodalis*), Karner blue butterfly (*Lycaeides Melissa samuelis*), and piping plover (*Charadrius melodus*), and the threatened bald eagle (*Haliaeetus leucocephalus*), and Pitcher's (Dune) thistle (*Cirsium pitcheri*)," and that " ...the proposed projects are not likely to adversely affect these endangered and threatened species or critical habitat."

Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

This action violates no Federal, State, or local environmental protection laws.

MITIGATION

In order to minimize the environmental impacts associated with the Selected Alternative, the following measures will be taken:

- All disturbed areas will be re-vegetated with native species.
- Noxious weed seeds will be restricted from use in seed mixes, and exotic invasive species will be managed when feasible.

- The impact of a maximum of 0.78 acres of wetlands will be mitigated through the restoration of a wetland area that is approximately 2 miles east, which is approximately 2.5 acre in size.
- An erosion and sediment control plan will be prepared to meet Indiana and National Park Service standards and guidelines. All Best Management Practices to limit erosion and sedimentation will be incorporated to the extent possible.
- If any archeological resources are discovered during the construction of the project, all work will stop, and the appropriate agency personnel will be notified. In the unlikely event that human remains or cultural items subject to the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered, all work will stop, and the appropriate provisions of NAGPRA will be followed.

PUBLIC INVOLVEMENT

A newsletter advising the public of the proposed action and seeking comments regarding potential alternatives was distributed in December 2004. Articles regarding the project also appeared in several local papers. The Superintendent met with the Town of Beverly Shores to discuss the project in February 2006. Approximately 40 comments were received during public scoping. Approximately 19 comments were in favor of the obliteration of Beverly Drive, approximately 19 comments were in favor of keeping Beverly Drive open, and approximately two comments were in favor of keeping access through Beverly Drive either by road or trail. The EA was made available for public review and comment during a 30-day period starting September 18, 2006. A notice of availability was published in the local papers during the week prior. Copies of the EA were made available at the Headquarters of the Indiana Dunes National Lakeshore, the National Lakeshore's Dorothy Buell Memorial Visitor Center, the Beverly Shore's Town Hall, and the Michigan City Public Library. The public review and comment period for the EA closed on October 17, 2006, and approximately six public comments were received. Verbal comments received during the public meeting held on September 26, 2006 at the Dorothy Buell Memorial Visitor Center were also noted. The Statement of Findings to document wetland impacts and the selection of the preferred alternative was made available for public comment from August 1, 2007 through August 31, 2007. One comment was received.

FEDERAL CONSISTENCY UNDER THE COASTAL ZONE MANAGEMENT ACT

In a letter dated July 19, 2007, the proposed project was submitted to the Indiana Department of Natural Resources Federal Consistency Coordinator stating that, "The proposed activity complies with Indiana's approved coastal management program and will be conducted in a manner consistent with such program."

The Indiana Department of Natural Resources responded on October 12, 2007, stating that all comments regarding the proposed activity have been incorporated into the EA, and that they had no objections to the project.

IMPAIRMENT STATEMENT

In addition to reviewing the list of significance criteria, the National Park Service has determined that implementation of the proposal will not constitute an impairment to the critical resources and values of the National Lakeshore. This conclusion is based on a thorough analysis of the environmental impacts described in the EA, public comments, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in National Park Service Management Policies 2006. The plan under the Selected Alternative will not result in any adverse impacts to National Lakeshore resources. Overall, the plan results in benefits to National Lakeshore resources and values, opportunities for their enjoyment, and it does not result in their impairment.

CONCLUSIONS

The Selected Alternative does not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS). The Selected Alternative will not have a significant effect on the human environment. Negative environmental impacts that could occur are negligible or minor in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any Federal, State, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended: _____ 10/26/07

Constantine J. Dillon
Superintendent
Indiana Dunes National Lakeshore

Date

Recommended: _____ 10/22/07

Kevin S. Rose
Environmental Compliance Specialist
Eastern Federal Lands Highway Division

Date

Approved: Paul T. Nishimoto 10/23/07

Paul T. Nishimoto
Planning and Programming Engineer
Eastern Federal Lands Highway Division

Date

Approved: Ernest Quintana 11-15-2007

Ernest Quintana
Regional Director
National Park Service, Midwest Region

Date